

ABSTRACT OF THE DISCLOSURE

A communication system includes a mobile station (100) having a transmitter (210) operating on one of a plurality of frequency channels in a first RF frequency band; an associated local area communication subsystem (304) operating by frequency hopping amongst a plurality of channels in a second RF frequency band and a controller (120) that operates in one embodiment for altering a frequency hopping pattern of the local area subsystem as a function of a currently specified frequency channel in the first frequency band. The frequency hopping pattern is preferably also altered as a function of a bandwidth of the currently specified frequency channel of the mobile station. The frequency hopping pattern is altered if the currently specified frequency channel is one having a harmonic frequency that lies in the second frequency band. Preferably, the first frequency band is in the range of about 800MHz to about 900MHz, the second frequency band is in the range of about 2400MHz to about 2500MHz, and the bandwidth is in the range of about 30kHz to about 5MHz. In another embodiment transmission of data is instead inhibited on one or more specified hopped-to frequency channels to avoid interference from the mobile station transmitter.

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